

cardiotoxicity (87%), however the difference was not statistically significant.

**Conclusions:** AC CMP can occur at lower cumulative doses. Doxorubicin dose, time to development of AC CMP and grade of cardiotoxicity did not affect the response to treatment. Large prospective studies to explore the role of biomarkers and genetic polymorphism in early detection and prevention of AC CMP respectively need to be conducted.

## Takotsubo cardiomyopathy (TCM) versus dilated cardiomyopathy (DCM)

A. Lalchandani, J.A. Khan, B. Varshney, M. Godara, A.K. Singh, T. Midha, N. Gupta, M. Razi, M. Agarwal, M. Navin, S. Raj

P G Institute of Medicine, GSVM Medical College, Kanpur, India

**Aims:** To study the clinical profile of Takotsubo cardiomyopathy & DCMP.

**Methods:** The study was conducted on 60 patients in Deptt of Medicine G.S.V.M. Medical college, in between January 2012 to September 2013.

Inclusion criteria were: Modified Mayo Criteria.

- Signs & Symptoms of Heart failure
- New ECG abnormalities( ST- segment elevation or T-wave inversion or modest elevation in cardiac troponin)
- Left ventricular ejection fraction < 45%
- Absence of obstructive coronary disease

Echo done in all cases

**Results:** There is a significant difference in the sex distribution between the two types of cardiomyopathies ( $p=0.02$ ), DCMP being more common in males (68%) while TCM more common in females (90%).

None of the cases of TCM presented with pedal edema & pansystolic murmur while 66% cases of DCMP had pedal edema & all of them had pansystolic murmur ( $p < 0.001$ )

There is a significant association between psychological stress & TCM ( $p<0.001$ )

There is a significant association between Alcohol & DCMP.

All TCM cases had a very good prognosis & all cases improved significantly within 3 months

**Conclusion:** DCMP is more common in males(68%) while TCM is more common in females (90%).

None of the cases of TCM presented with pedal edema & pansystolic murmur while cases of DCMP had pedal edema & all of them had pansystolic murmur.

There is a significant association between psychological stress & TCM.

There is a significant association between Alcohol & DCMP.

All TCM cases had a very good prognosis & all cases improved significantly within 3 months with proper management and care.

## Incidence of Ischemia in end stage renal disease patients with uremic cardiomyopathy in Eastern India

Madhumanti Panja, Ayan Kar, Debabrata Roy, Soumitra Kumar, Manotosh Panja

Rabindranath Tagore International Institute of Cardiac Sciences, Kolkata, India

**Background:** Uremic cardiomyopathy is the most important cause of death amongst end stage renal disease. The incidence of Ischemic heart disease (IHD) in such patients is only 11% worldwide. However, incidence of IHD is unknown in Eastern Indian end stage renal disease patients with uremic cardiomyopathy.

**Methods:** A total of 90 patients who underwent renal transplantation at our institute were enrolled for the study. All underwent Echocardiography as routine pre-transplant evaluation protocol. Those with uremic cardiomyopathy underwent Dobutamine Stress Echocardiography (DSE) for assessment of the presence of IHD. All such patients were also evaluated for presence or absence of standard CAD risk factors.

**Results:** 30 out of 90 patients (33%) were diagnosed to have Uremic cardiomyopathy. 23 patients were male and 7 were female. 11% were smokers, 10% hypertensives, 9% diabetics and 10% were dyslipidemic. DSE was positive in only 5 patients (16.66%).

**Conclusion:** The incidence of IHD in end stage renal failure patients with Uremic Cardiomyopathy in Eastern India is higher than the world literature.

## Guideline recommended medication use among systolic heart failure patients in India: Insights from the American college of cardiology practice innovation and clinical excellence (PINNACLE)<sup>®</sup> India Registry

Y. Pokharel, R. Hira, A. Kalra, S. Shore, P. Kerkar, G. Kumar, S. Risch, V. Vicera, W. Oetgen, M. Turakhia, N. Glusenkamp, S. Virani

Baylor College of Medicine, Houston, Texas, USA

**Background:** Angiotensin converting enzyme inhibitors (ACE-I) or angiotensin receptor blockers (ARB) and beta blockers (BB) are class I indications in heart failure (HF) patients with an ejection fraction (EF) <40%. Little is known about the use of these medications in outpatients with systolic HF in India.

**Methods:** PINNACLE<sup>®</sup> India is the first cardiovascular quality improvement program in India to capture, report and improve outpatient performance measure. Among patients with EF <40% enrolled between January 2012 and June 2014 from 11 outpatient centers, we evaluated the use of ACE-I/ARB, BB or both on any outpatient encounter.

**Results:** In 52880 patients with reported EF, 15940 (30%) had an EF ≤40%. The frequency of ACE-I/ARB; BB; and combined ACE-I/ARB+BB use was documented in 5257 (33%); 5450 (34%); and 4647 (29%) of patients with EF ≤40%, respectively. Women, patients >65 years and those receiving care in practices without electronic medical records had lower documented medication use (Table). The number of patients receiving recommended medications increased after the first 3 months of reporting and subsequently remained steady (data not shown).

**Conclusions:** Among patients with systolic HF enrolled in the PINNACLE<sup>®</sup> India Registry, about 2/3<sup>rd</sup> did not have documentation of receipt of guideline recommended medications. A small improvement was observed in follow-up reporting. These results indicate an opportunity to improve quality of care concordant with treatment guidelines for patients with EF <40% in India.